



# Armed Forces College of Medicine

## AFCM



# **Endocrine and urogenital module**

## **Clinical Integrated Cases Pretest 2**

# Question 1



**Considering how pancreatic islets are perfused and how pancreatic hormones act in a paracrine manner, which of the following can occur?**

- a. Alpha cells inhibit beta cells
- b. Delta cells inhibit alpha cells
- c. Beta cells stimulate Alpha cells
- d. Delta cells stimulate Beta cells
- e. Alpha cells inhibit Delta cells

## Question 2



**Which of the following cellular communication occurs between cells in the islets of Langerhans?**

- a) Gap junction
- b) Tight junction
- c) Desmosomes
- d) Fascia adherens
- e) Zonula occludens

# Question 3



**In which one of the following tissues GLUT-4 is responsible for the transport of glucose into the cell?**

- a. Exercising skeletal muscle.
- b. Beta cells of the pancreas.
- c. Kidney.
- d. Resting skeletal muscle.
- e. Liver.



## Question 4

**Which of the following is an action of insulin hormone?**

- a. Reducing urine formation.
- b. Stimulating gluconeogenesis.
- c. Converting glycogen to glucose.
- d. Enhancing potassium entry into cells.
- e. Increasing plasma amino acid concentration.



## Question 5

**In Type I diabetes, the increased production of ketone bodies is primarily a result of which of the following?**

- a) An increased rate of lipolysis and fatty acid oxidation
- b) An increase in the rate of glycogenolysis
- c) Decrease the activity of lipoprotein lipase enzyme
- d) Re-esterification of Glycerol and fatty acids
- e) Increased gluconeogenesis



## Question 6

**Which of the following laboratory measurement indicates the blood glucose control over a period of weeks to months?**

- a) Measurement of blood glucose
- b) Measurement of HbA1C
- c) Measurement of urinary ketone bodies
- d) Measurement of insulin
- e) Measurement of fasting c-peptide level

# Question 7



**The following is an adverse effect of insulin:**

- a. Hypernatremia
- b. Hyponatremia
- c. Hypokalemia
- d. Hyperkalemia
- e. Hypocalcemia



# Question 8

**The insulin of choice in DKA is:**

- a. Glargine
- b. Detemir
- c. NPH
- d. Regular insulin
- e. Degludec

# Question 9



**All of the following are presentation for DKA except:**

- A. Vomiting.
- B. Abdominal pain.
- C. Kussmaul breathing.
- D. Dehydration.
- E. Constipation.

## Question 10

**The important management steps for a patient presented with DKA are:**

- A. Fluids restriction and insulin infusion.
- B. Fluids administration and insulin infusion.
- C. PPI administration.
- D. HCO<sub>3</sub> administration.
- E. All of the above.



Thank  
you

